



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of

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and Jozef Van Puymbroeck

Group Art Unit: 2106

Application No. 08/651,036

15/C
P20
3/19/98

Filed: May 17, 1996

For: **METHOD EMPLOYING UV LASER PULSES OF VARIED ENERGY DENSITY TO FORM DEPTHWISE SELF-LIMITING BLIND VIAS IN MULTILAYERED TARGETS**

Date: March 10, 1998

Examiner: Gregory Mills

PRELIMINARY AMENDMENT

TO THE ASSISTANT
COMMISSIONER FOR PATENTS:

In response to the November 17, 1997 Office action finally rejecting the pending claims, please amend the above-identified patent application as follows.

In the Claims:

Amend claims 1, 4, and 22 as follows:

C 1
1. (Twice amended) A method for laser machining a depthwise self-limiting blind via in a multilayered target including at least first and second conductor layers having respective first and second conductor ablation energy thresholds and a dielectric layer having surfaces and a dielectric ablation energy threshold, the first and second conductor layers positioned above and below, respectively, the surfaces of the dielectric layer and the first and second conductor ablation energy thresholds exceeding the dielectric ablation energy threshold, comprising:

generating, from a nonexcimer laser at a first repetition rate of greater than about 200 Hz, a first laser output having a wavelength of less than 400 nm and containing at least one first laser pulse having a first